



US005509202A

United States Patent [19]

[11] Patent Number: 5,509,202

Abdow

[45] Date of Patent: Apr. 23, 1996

[54] METHODS FOR UTILIZING HYDROSTATIC SEALING SLEEVE WIRE CONNECTIONS

[75] Inventor: David A. Abdow, Somerset, Mass.

[73] Assignee: The United States of America as represented by the Secretary of the Navy, Washington, D.C.

4,501,927	2/1985	Sievert	174/93
4,712,285	12/1987	Morel et al.	29/870 X
4,839,470	6/1989	Ventura	29/871 X
4,883,925	11/1989	Graf	29/871 X
5,234,515	8/1993	Sekkelsten	156/49
5,278,354	1/1994	Lhomme	29/871 X

FOREIGN PATENT DOCUMENTS

1102837 2/1968 United Kingdom 174/93

[21] Appl. No.: 453,858

[22] Filed: May 30, 1995

Primary Examiner—Carl J. Arbes

Attorney, Agent, or Firm—Michael J. McGowan; Prithvi C. Lall; Michael F. Oglo

Related U.S. Application Data

[62] Division of Ser. No. 978,550, Nov. 19, 1992, Pat. No. 5,432,302.

[51] Int. Cl.⁶ H01R 43/00

[52] U.S. Cl. 29/871; 156/49; 174/93

[58] Field of Search 174/93, 94 R; 29/871, 870, 869; 156/49; 285/909

References Cited

U.S. PATENT DOCUMENTS

2,958,723	11/1960	Logan et al.	174/93 X
4,208,788	6/1980	Siden	29/871 X
4,484,022	11/1984	Eilentrapp	29/870 X

[57] ABSTRACT

A hydrostatic sealing sleeve hydrostatically seals a spliced wire connection in high pressure underwater conditions. The sealing sleeve is fashioned from an elastomeric compound, such as neoprene, and is fitted over one end of an insulated wire that is to be spliced onto a butt wire splice. The other insulated wire is spliced together with the first wire and the sealing sleeve is then slid over the butt wire splice where it rests in a centrally located cavity inside the sleeve. The outer ends of the sealing sleeve include sealing baffles which compress onto the outer peripheral surfaces of the insulated wires, creating a high pressure water tight seal.

1 Claim, 1 Drawing Sheet

